

WE CLAIM:

1. A concentrate composition for removing coatings from surfaces comprising:

- 5 (a) 0 to 99.5 percent by weight, based on the total weight of the concentrate composition, of a carrier selected from at least one of acetone, methyl acetate and water;
- (b) 0.01 to 35 percent by weight, based on the total weight of the concentrate composition, of at least one surfactant selected from one or more
10 of pyrrolidone-derived surfactants having substituents containing 6 to 14 carbon atoms and alkoxyated acetylenic compounds; and
- (c) 0.5 to 90 percent by weight, based on the total weight of the concentrate composition, of at least one pH adjusting component having the structure:



wherein R¹, R², and R³ are independently selected from the group consisting of hydrogen, alkanyl groups having 1 to 8 carbon atoms, hydroxyalkanyl groups having 1 to 8 carbon atoms, and aminoalkanyl groups having 1 to 8 carbon atoms; wherein the volatile organic compound (VOC) content of the
20 composition is less than 2.0 lb./gal; and wherein when the concentrate composition contains at least 20% by weight water, the concentrate composition may further comprise up to 5.0 percent by weight, based on the total weight of the concentrate composition, of at least one hydrotropic surfactant different from the other components in the composition.

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2. The composition of claim 1, wherein component (a) includes at least 20% by weight water based on the total weight of the concentrate

composition and further comprises a hydrotropic surfactant selected from the group consisting of aromatic and aliphatic sulfonates.

3. A cleaning solution for removing coatings from surfaces
- 5 comprising the concentrate composition of claim 1 diluted with water to a concentration of up to 30 percent by weight, based on the total weight of the cleaning solution.

4. The composition of claim 1, wherein the weight ratio of
- 10 component (b) to component (c) ranges from 1:2 to 1:10.

5. The composition of claim 1, wherein (c) is selected from one or more of ammonia, dimethylethanolamine, diethanolamine, triethanolamine, isopropanolamine, and aminomethylpropanol.

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6. The composition of claim 1, wherein component (a) is present in an amount ranging from 50 to 99 percent by weight, based on the total weight of the concentrate composition.

- 20 7. The composition of claim 6, wherein component (a) is acetone.

8. The composition of claim 1, wherein component (b) is present in an amount ranging from 0.01 to 5 percent by weight, based on the total weight of the concentrate composition.

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9. The composition of claim 1, wherein component (c) is present in an amount ranging from 0.5 to 20 percent by weight, based on the total weight of the concentrate composition.

10. A concentrate composition for removing coatings from surfaces comprising:

(a) 50 to 99 percent by weight, based on the total weight of the concentrate composition, acetone;

5 (b) 0.01 to 5 percent by weight, based on the total weight of the concentrate composition, of at least one pyrrolidone-derived surfactant; and

(c) 0.5 to 20 percent by weight, based on the total weight of the concentrate composition, dimethylethanolamine.

10 11. A concentrate composition for removing coatings from surfaces comprising:

(a) 50 to 99 percent by weight, based on the total weight of the concentrate composition, of a mixture of methyl acetate and acetone;

15 (b) 0.01 to 5 percent by weight, based on the total weight of the concentrate composition, of at least one pyrrolidone-derived surfactant; and

(c) 0.5 to 20 percent by weight, based on the total weight of the concentrate composition, dimethylethanolamine.

20 12. A concentrate composition for removing coatings from surfaces comprising:

(a) at least 20 percent by weight, based on the total weight of the concentrate composition, water;

(b) 0.01 to 5 percent by weight, based on the total weight of the concentrate composition, of at least one pyrrolidone-derived surfactant;

25 (c) 0.5 to 20 percent by weight, based on the total weight of the concentrate composition, dimethylethanolamine; and

(d) 0.01 to 5.0 percent by weight, based on the total weight of the concentrate composition, of at least one hydrotropic surfactant different from the other components in the composition.

13. A concentrate composition for removing coatings from surfaces comprising:

(a) at least 20 percent by weight, based on the total weight of the concentrate composition, water;

5 (b) 0.01 to 5 percent by weight, based on the total weight of the concentrate composition, of at least one surfactant selected from alkoxyated acetylenic compounds;

(c) 0.5 to 20 percent by weight, based on the total weight of the concentrate composition, dimethylethanolamine; and

10 (d) up to 5.0 percent by weight, based on the total weight of the concentrate composition, of at least one hydrotropic surfactant different from the other components in the composition.

14. A process for removing coatings from surfaces comprising:

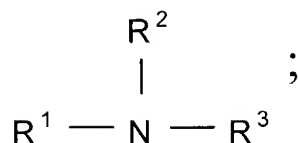
15 (a) diluting a concentrate composition with water to form a cleaning solution; and

(b) contacting the surfaces with the cleaning solution until coating residues are substantially removed from the surfaces; wherein the concentrate composition comprises:

20 (i) 0 to 99.5 percent by weight, based on the total weight of the concentrate composition, of a carrier selected from at least one of acetone, methyl acetate and water;

(ii) 0.01 to 35 percent by weight, based on the total weight of the concentrate composition, of at least one surfactant selected from one or
25 more of pyrrolidone-derived surfactants having substituents containing 6 to 14 carbon atoms and alkoxyated acetylenic compounds; and

(iii) 0.5 to 90 percent by weight, based on the total weight of the concentrate composition, of at least one pH adjusting component having the structure:



wherein R^1 , R^2 , and R^3 are independently selected from the group consisting of hydrogen, alkanyl groups having 1 to 8 carbon atoms, hydroxyalkanyl groups having 1 to 8 carbon atoms, and aminoalkanyl groups having 1 to 8 carbon atoms; wherein the volatile organic compound (VOC) content of the composition is less than 2.0 lb./gal; and wherein when the concentrate composition contains at least 20% by weight water, based on the total weight of the concentrate composition, the concentrate composition may further comprise up to 5.0 percent by weight, based on the total weight of the concentrate composition, of at least one hydrotropic surfactant different from the other components in the concentrate composition.

15. The process of claim 14, wherein after step (a), the concentrate composition is present in the cleaning solution in an amount of 1 to 30 percent by weight, based on the total weight of the cleaning solution.

16. The process of claim 14, wherein the surfaces are contacted with the cleaning solution by spray application.

17. The process of claim 16, wherein the surfaces are contacted with the cleaning solution for a time ranging from 1 to 60 seconds.

18. The process of claim 14, wherein the surfaces are contacted with the cleaning solution by immersion.

19. The process of claim 18, wherein the surfaces are contacted with the cleaning solution for a time ranging from 0.1 to 24 hours.

20. The process of claim 14, wherein after step (a), the cleaning solution is heated to a temperature of 33 to 54°C.

21. The process of claim 14, wherein the surfaces to be cleaned
5 comprise paint application equipment.

22. The process of claim 21, wherein during step (b), the cleaning solution is sprayed onto the paint application equipment.

10 23. The process of claim 21, wherein during step (b), the cleaning solution is circulated through the paint application equipment.

24. The process of claim 14, wherein component (i) includes at least 20% by weight water based on the total weight of the concentrate
15 composition and further comprises a hydrotropic surfactant selected from the group consisting of aromatic and aliphatic sulfonates.

25. The process of claim 14, wherein the weight ratio of component (ii) to component (iii) ranges from 1:2 to 1:10.
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26. The process of claim 14, wherein component (iii) is selected from one or more of ammonia, dimethylethanolamine, diethanolamine, triethanolamine, isopropanolamine, and aminomethylpropanol.

25 27. The process of claim 14, wherein component (i) is present in the concentrate composition in an amount ranging from 50 to 99 percent by weight, based on the total weight of the concentrate composition.

28. The process of claim 27, wherein component (i) is acetone.
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29. The process of claim 14, wherein component (ii) is present in the concentrate composition in an amount ranging from 0.01 to 5 percent by weight, based on the total weight of the concentrate composition.

- 5 30. The process of claim 14, wherein component (iii) is present in the concentrate composition in an amount ranging from 0.5 to 20 percent by weight, based on the total weight of the concentrate composition.